

DRAFT EXTERIOR LIGHTING STANDARDS

PURPOSE: These standards have been developed for a Lighting District in the rural unincorporated Santa Clarita and Antelope Valley areas.

22.44.500 Exterior lighting districts.

A. Definitions.

1. “Cutoff fixture” means a light fixture that emits not more than 2.5 percent of its light in the area above a horizontal plane passing through the lowest point of the fixture and no more than 10 percent of its light in the area between zero and 10 degrees below such horizontal plane. Cutoff fixture is functionally identical to “Shielded fixture”.

2. “Drop-down lens” means a lens or diffuser that extends below a horizontal plane passing through the lowest point of the opaque portion of a light fixture.

3. “Exterior lighting” means any equipment or fixture located or used to provide illumination of outdoor areas, objects or activities.

4. “Foot-candle” means a unit of light energy received some distance away from a source. Foot-candles may be measured by a photometer.

5. “Full cutoff fixture” means a light fixture that emits no light in the area above a horizontal plane passing through the lowest point of the fixture and not more than 10 percent of its light in the area between zero and 10 degrees below such horizontal plane. Full cutoff fixture is functionally identical to “Fully shielded fixture”.

56. “Light trespass” means light falling across a property line onto an adjoining lot or parcel of land or onto an adjoining public right-of-way. Light trespass shall be determined by a measurement, taken at ground level, of:

a. Over 0.5 foot-candles on a lot or parcel of land in a residential or agricultural zone; or

b. Over 1.0 foot-candles on a lot or parcel of land in any other zone.

76. “Lumen” means a unit of light energy produced by a fixture, calculated as a rating by the manufacturer. For example, a 40-watt incandescent lamp produces approximately 400 lumens, and a 35-watt high-pressure sodium lamp produces 2,300 lumens.

B. Exemptions.

1. The following exterior lighting shall be exempt from the provisions of this subsection:

a. Public and private street lighting;

b. Athletic field lights used within a school campus or public or private park;

c. Temporary lighting used by law enforcement or emergency services personnel to protect life or property;

d. Temporary lighting used for the construction or repair of roadways, utilities, and other public infrastructure;

e. Temporary lighting for activities permitted by a film permit or Temporary Use Permit pursuant to Part 14 of Chapter 22.56; and

f. Seasonal lighting displays related to cultural or religious celebrations, provided that the duration such displays on a lot or parcel of land does not exceed 30 cumulative days within any 12 month period.

2. Security lighting for public facilities subject to this Title, including but not limited to prisons, airports, and hospitals shall utilize cutoff fixtures, but be exempt from other provisions of this subsection;

C. Lighting Plan.

1. New buildings and new building additions shall require a site plan for review and approval by the Director showing the location, manufacturer's maximum output rating (lumens), fixture type, and fixture height of all exterior lighting, as well as information about shut-off timers where required by this subsection; and

2. The site plan shall be certified as meeting the requirements of this subsection by a licensed professional engineer when the development proposal concerns a non-residential use or a residential use consisting of 3 or more dwelling units.

D. General Requirements.

1. Maximum Output. The cumulative manufacturer's maximum output of all exterior lighting on a lot or parcel of land shall not exceed:

a. ~~40,000~~5,000 lumens per net acre of such lot or parcel of land in a residential or agricultural zone, but in no case shall less than 2,300 lumens per unattached dwelling be required. Fixtures for illumination of riding arenas and other private outdoor recreational facilities shall not be counted towards this limit, provided that all lighting exceeding the maximum output is extinguished at or before 10 p.m.; or

b. ~~25,000~~12,500 lumens per net acre of such lot or parcel of land in any other zone.

2. Light Trespass. Exterior lighting shall not cause light trespass.

3. Fixture Types.

~~a. Each exterior light with a manufacturer's maximum output rating between 400 lumens and 1,999 lumens shall be a cutoff fixture; and~~

~~b. Each exterior light with a manufacturer's maximum output rating of 2,000 lumens or greater shall be a full cutoff fixture; and~~

~~c. Each exterior light installed above 15 feet in height, as measured from finished grade, shall have a manufacturer's maximum output rating of less than 400 lumens.~~

4. Fixture Height. Each exterior light installed above 15 feet in height in a residential or agricultural zone, as measured from finished grade, shall have a manufacturer's maximum output rating of less than 400 lumens. ~~A freestanding exterior lighting fixture shall not exceed 15 feet in height in a residential or agricultural zone, as measured from finished grade to the highest point of such fixture.~~

5. Shut-off Timers. Exterior lighting in commercial and manufacturing zones shall be installed with time controls such that light power is reduced by not less than 50 percent no later than ~~at~~ 10 p.m.

6. Maintenance. Exterior lighting shall be maintained in good repair, intact and free of severe cracks, with shielding securely attached and functional as designed.

E. Prohibited Lighting. The following types of exterior lighting shall be prohibited:

1. Drop-down lenses;
2. Mercury vapor lights; and
3. Searchlights, laser lights, or any other lighting that flashes, blinks, alternates, or moves.

F. Nonconforming Lighting. Exterior lighting in use on the effective date of the ordinance creating this Lighting District that does not meet the requirements of this section shall be removed or made to comply with the requirements of this subsection:

1. Within 6 months of the effective date of the ordinance creating this Lighting District if such lighting causes light trespass; or

2. Within 3 years of the effective date of the ordinance creating this Lighting

District if such lighting does not cause light trespass; ~~and~~ [and](#)

3. Nonconforming lighting modified by addition of an opaque shield shall be considered equivalent to a cutoff fixture, provided that no light is visible above a horizontal plane passing through the lowest point of the fixture.

G. Modification of standards. The director may permit modifications to the development standards specified in subsections 4.a, 4.c., 4.d., 4.e, 5., and 6., provided that:

[Insert CSD modification procedure]

APPENDIX

Figure 1: Recommended and Not Recommended Lighting Types

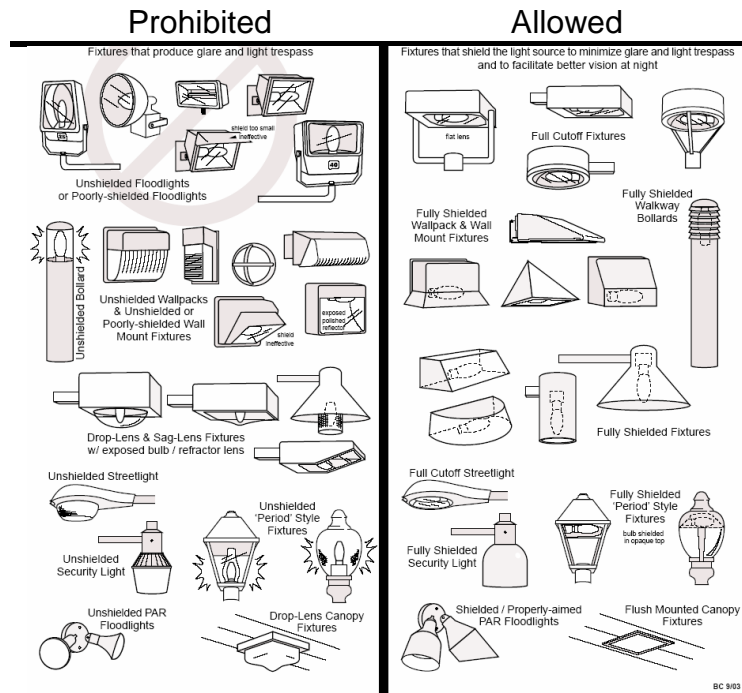


Figure 2: Comparison of Performance by Lamp Type

Factor	Incandescent	Fluorescent	Metal Halide	High-Pressure Sodium	Low-Pressure Sodium
Wattage	25-150	18-95	50-400	50-400	18-180
Output (lumens)	210-2700	1000-7500	1900-30,000	3600-46,000	1800-33,000
Efficiency (lumens/watt)	8-18	55-79	38-75	72-115	100-183
Lumen Maintenance (%)	90 (85)	85 (80)	75 (65)	90 (70)	100 (100)
Lamp Life (hours)	750-2000	10,000-20,000	10,000-20,000	18,000-24,000	16,000
Energy Use	high	medium	medium	low	lowest
Color Rendition	good	good	good	moderate	none*

Notes on Figure 2:

Wattage - Lamp wattages most commonly used in general outdoor lighting (not including sports lighting)

Output - approximate mean luminous outputs of lamps most commonly used in outdoor lighting

Efficiency - mean luminous efficiency for above lamp output range, taken at 50% of mean lifetime (does not include ballast losses)

Lumen Maintenance - percent of initial lamp output at 50% of mean lamp lifetime and at end of mean lifetime (in parentheses)

Lamp Life - approximate mean lifetime of indicated lamps

Energy Cost - relative energy costs

Color Rendition - relative ability of average observer to accurately perceive colors under lighting from indicated lamps only (* under pure LPS light, some discrimination of reds and oranges is possible, though they will appear as shades of brown. See also Note 9.14: LPS/other lamp type mix for color rendition with LPS energy savings.)

Figure 3: Diagram of Cutoff Performance

